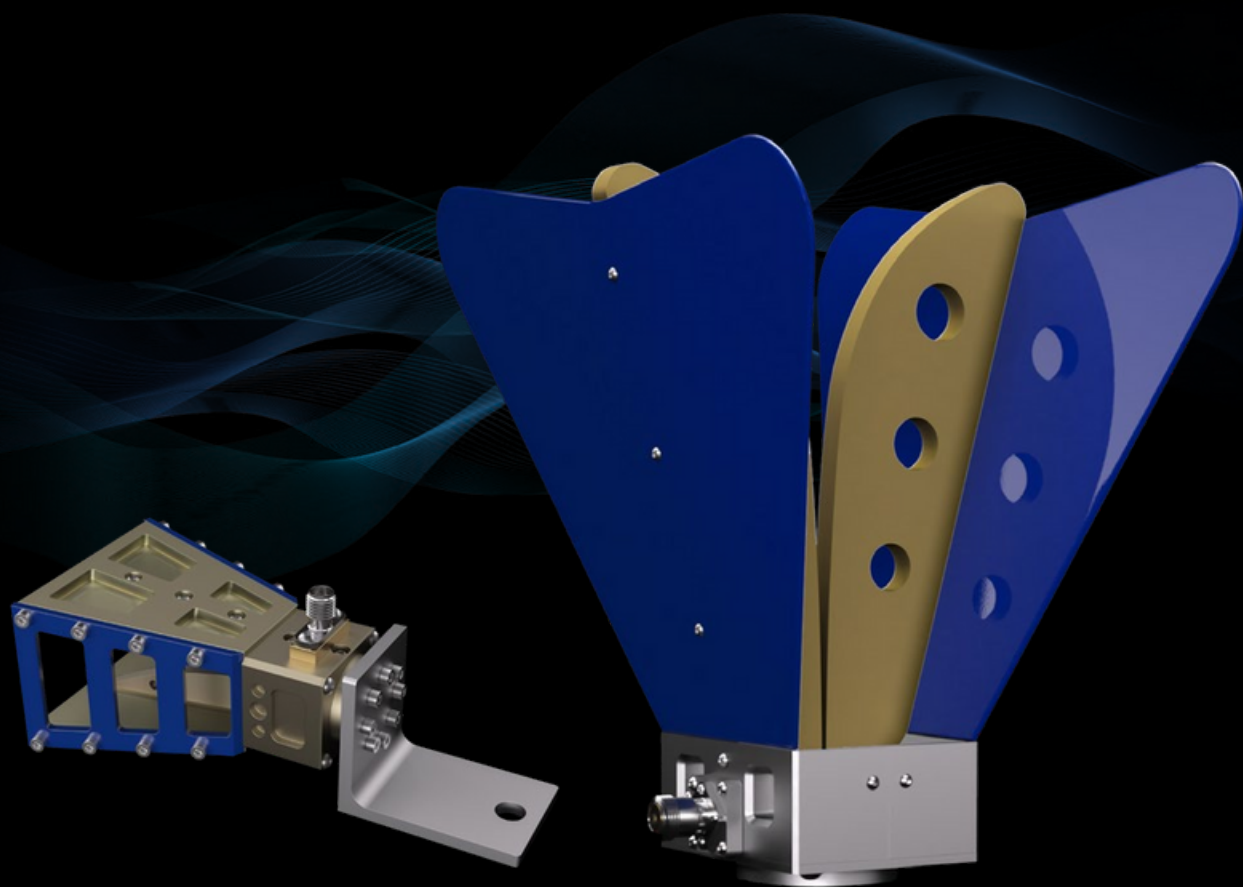


HIGH-POWER HORN ANTENNAS

**POWERLOG®**

**SERIES**

High gain and maximum power



✓ Optimal for EMC immunity testing  
with extremely high field strengths

✓ Exceptionally high power support  
✓ Small in size and lightweight



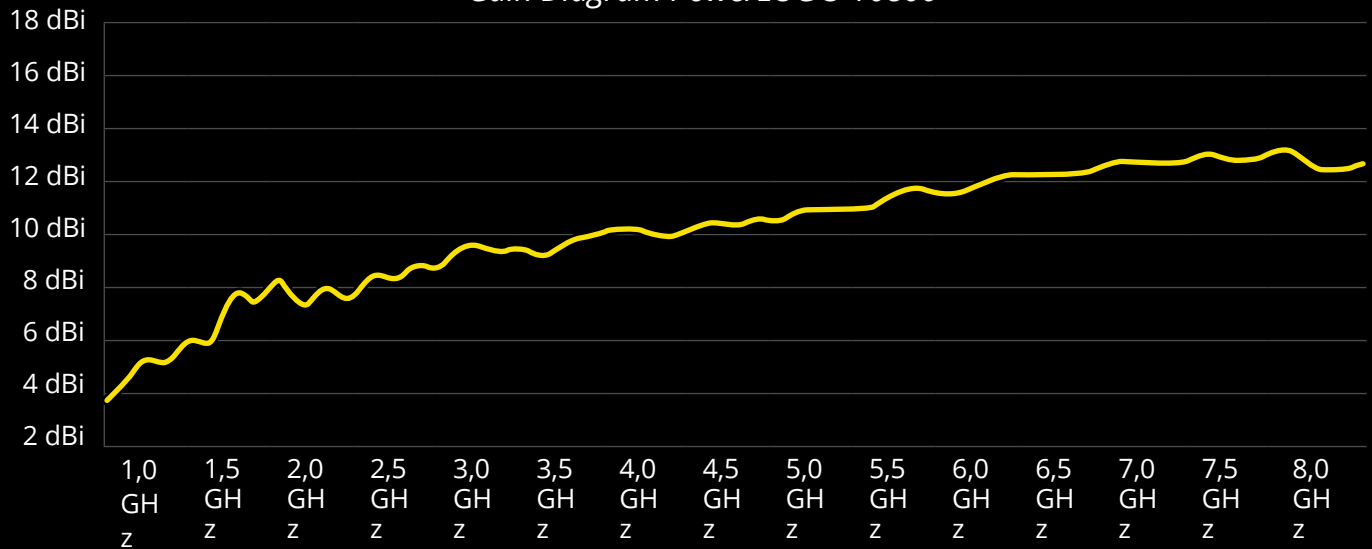
# Specifications

## PowerLOG® 10800

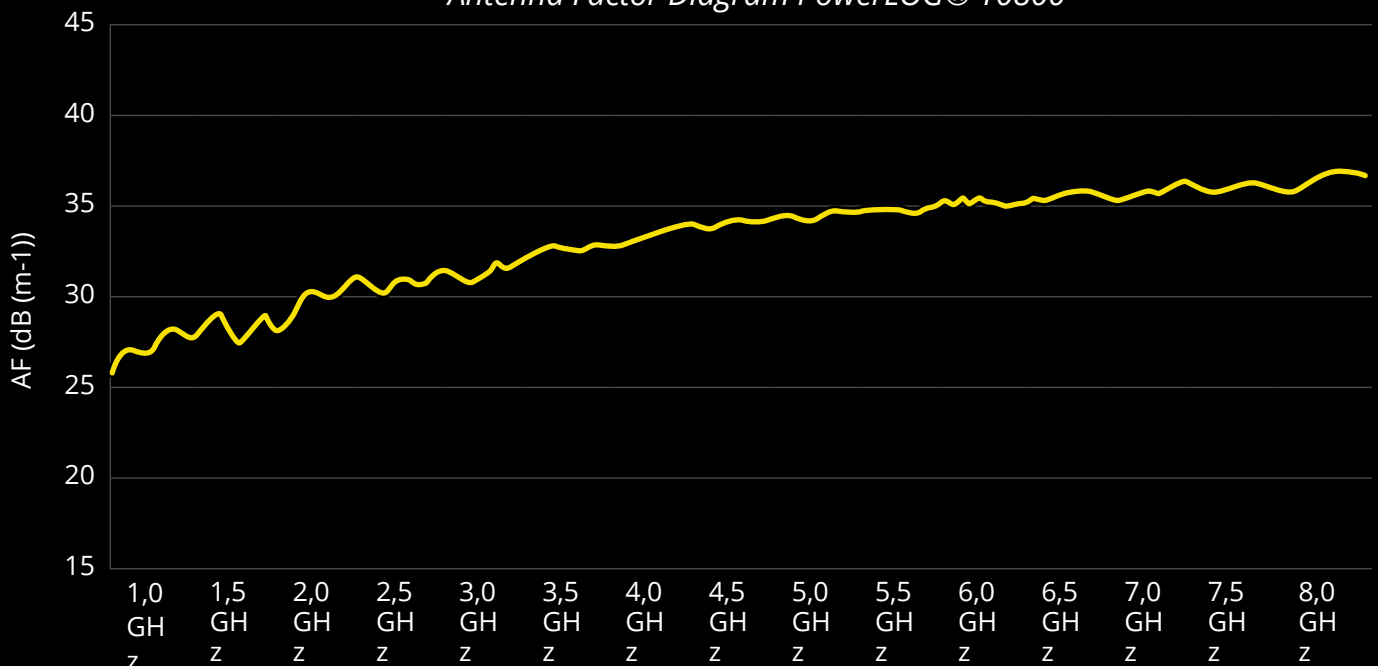
Dimensions [L x W x D]	235 x 252 x 175 mm	Nominal Impedance	50 Ohm	
Weight	1400 g	VSWR (typ.)	< 2,5:1	
Design	Dual-ridged horn	Max. Input Power	400 W (peak), 200 W (CW)	
Gain	4 – 13 dBi		Temperature Range	- 40° C – 85° C
RF Connection	N (female)	Relative Humidity	0 % – 95 %	
Frequency Range	1 GHz – 8 GHz	Warranty	2 years	

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 10800



Antenna Factor Diagram PowerLOG® 10800



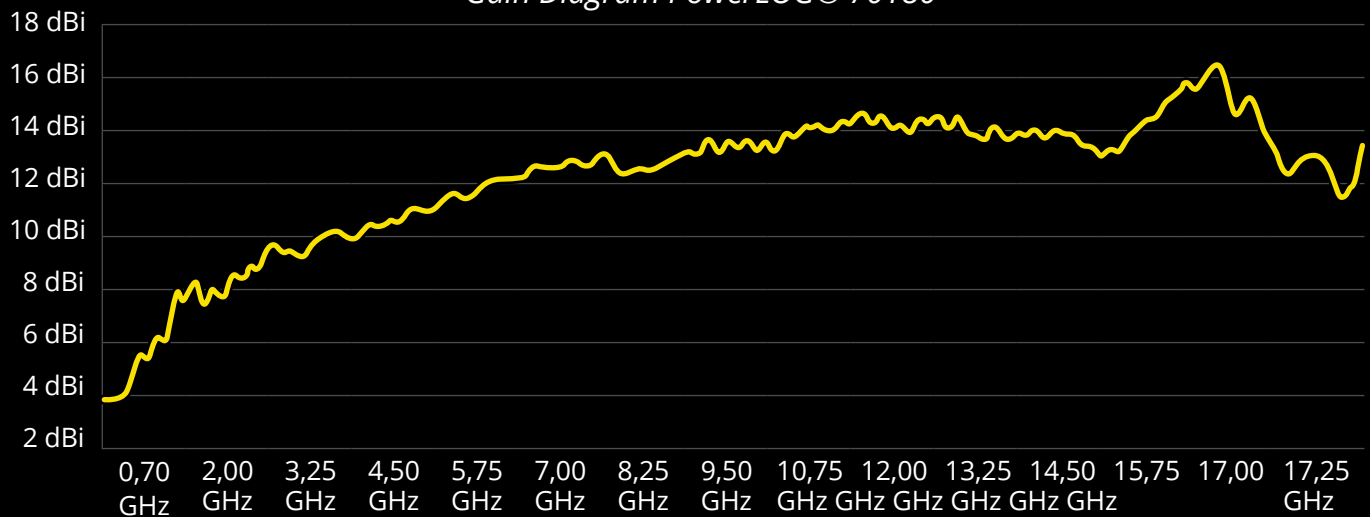
# Specifications

## PowerLOG® 70180

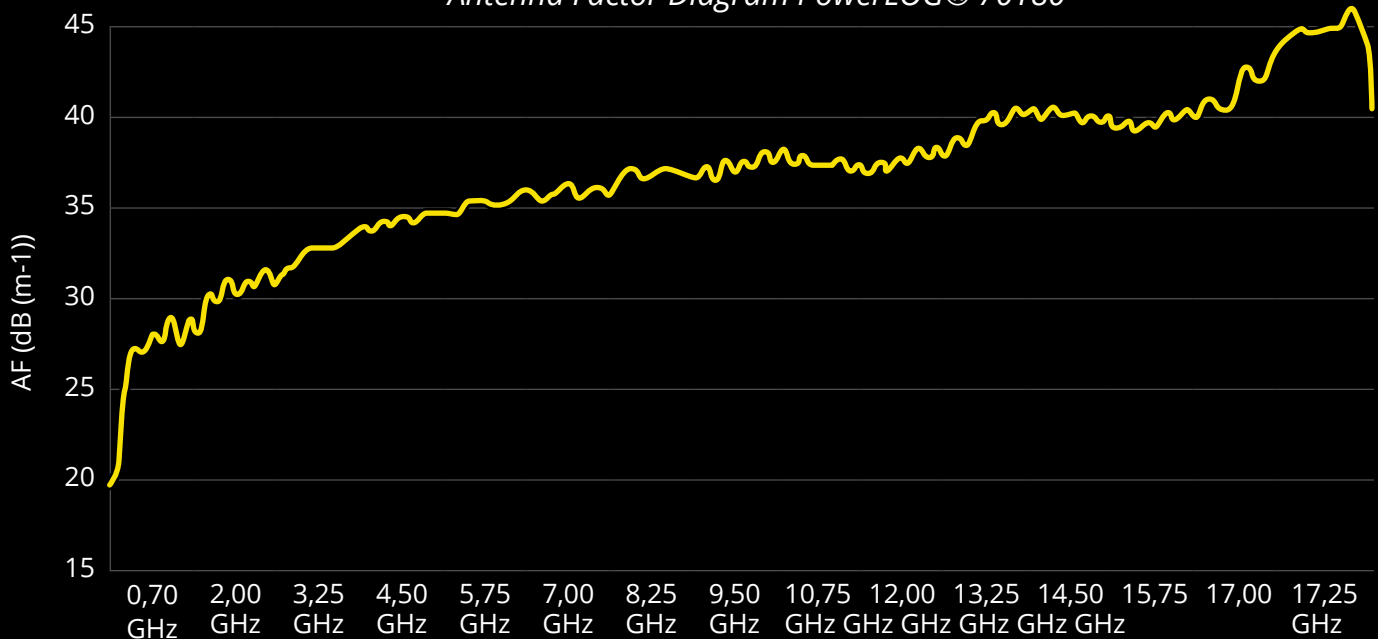
Dimensions [L x W x D]	235 x 252 x 175 mm	Nominal Impedance	50 Ohm
Weight	1400 g	VSWR (typ.)	< 3:1
Design	Dual-ridged horn	Max. Input Power	500 W (peak), 300 W (CW)
Gain	2 – 17 dBi		Temperature Range
RF Connection	N (female)	Relative Humidity	0 % – 95 %
Frequency Range	700 MHz – 18 GHz	Warranty	2 years

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 70180



Antenna Factor Diagram PowerLOG® 70180



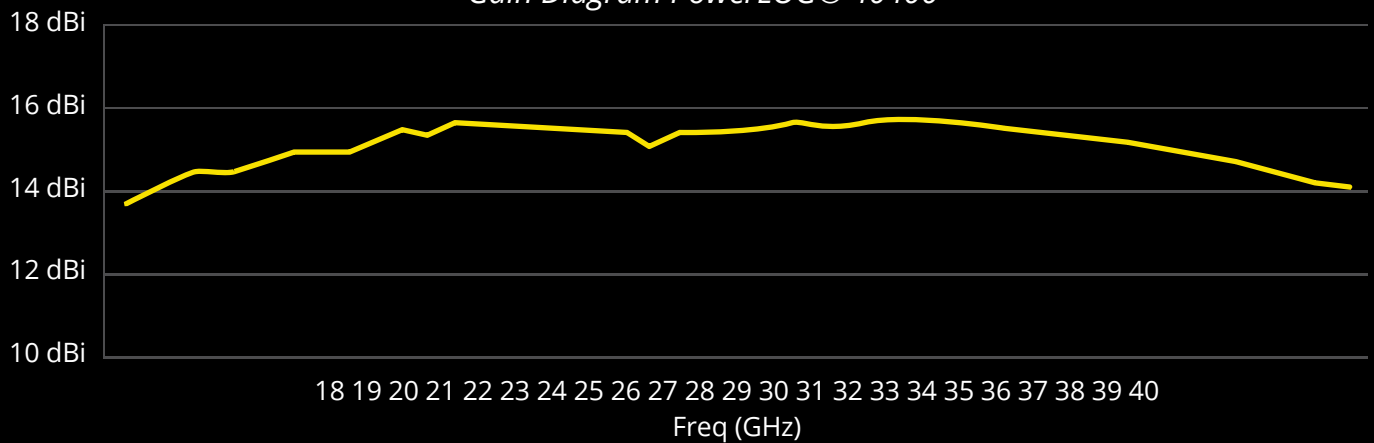
# Specifications

## PowerLOG® 40400

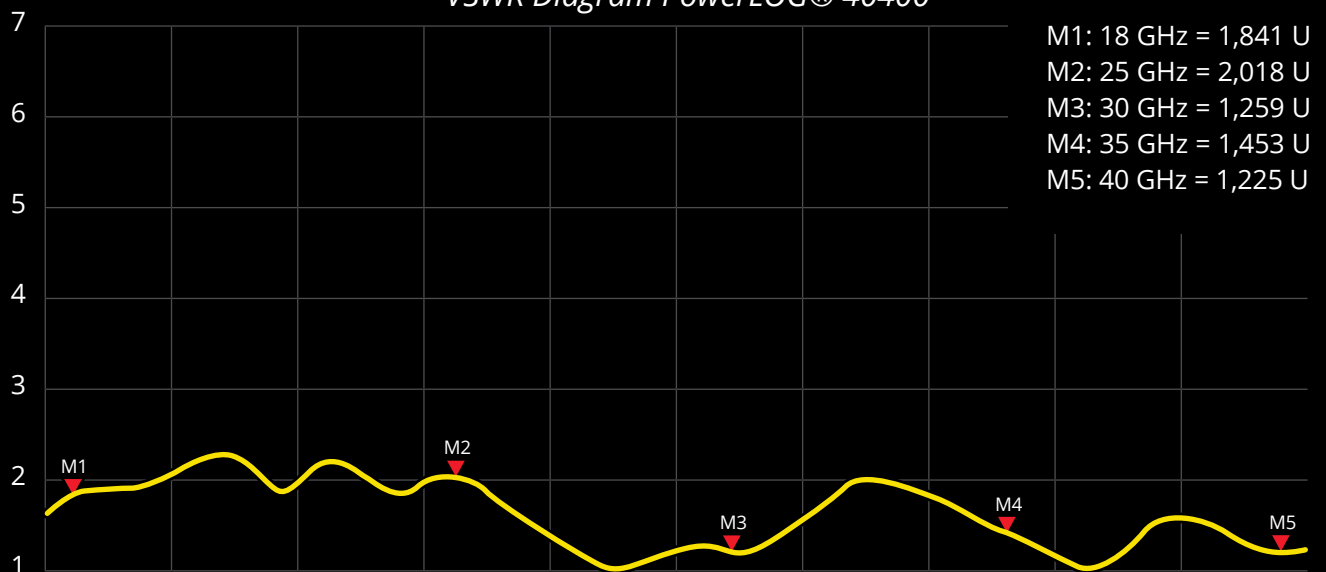
Dimensions [L x W x D]	74 x 55 x 38 mm	Nominal Impedance	50 Ohm
Weight	150 g	SWR (typ.)	< 2:1 (within 18 to 40GHz)
Design	Dual-ridged horn	Max. Input Power	300 W (peak), 150 W (CW)
Gain	12 – 17 dBi	Temperature Range	- 10° C – 60° C
RF Connection	K (2,92 mm), female	Relative Humidity	5 % – 80 %
Antenna Factor	24 – 40 dB/m	Warranty	2 years
Frequency Range	4 GHz – 40 GHz <small>(specific calibration data from 18 GHz to 40 GHz)</small>	Beamwidth	Vertical: 16° Horizontal: 20°

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 40400



VSWR Diagram PowerLOG® 40400



M1: 18 GHz = 1,841 U  
M2: 25 GHz = 2,018 U  
M3: 30 GHz = 1,259 U  
M4: 35 GHz = 1,453 U  
M5: 40 GHz = 1,225 U

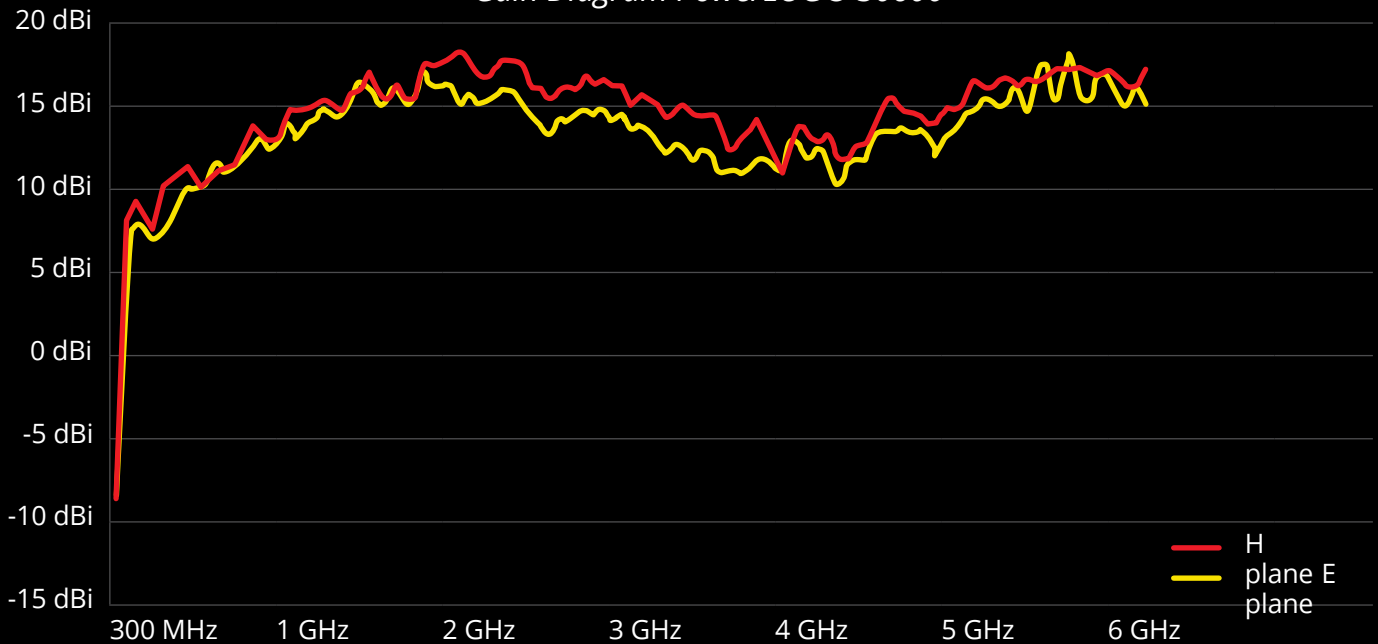
# Specifications

## PowerLOG® 30600

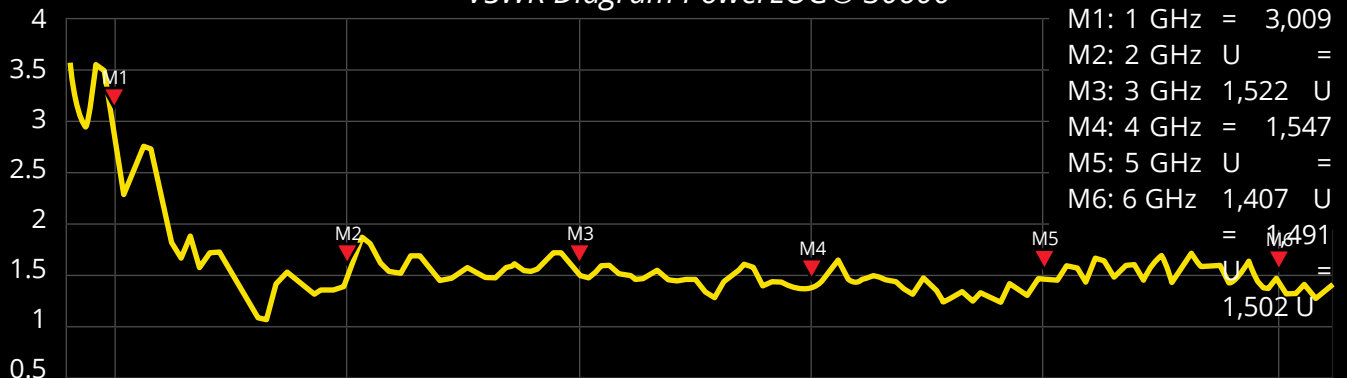
Dimensions [L x W x H]	756 x 600 x 393 mm	Nominal Impedance	50 Ohm
Weight	9 kg	VSWR (typ.)	low
Design	Double ridged horn	Max. Input Power	500 W
Gain	6 - 16 dBi	Temperature Range	- 10° C - 60°
RF Connection	K (2,92 mm), female	Relative Humidity	C 10 % - 70 %
Antenna Factor	24 - 35 dB/m	Warranty	2 years
Frequency Range	300 MHz - 6 GHz	Beamwidth	17° - 70°

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 30600



VSWR Diagram PowerLOG® 30600



# Specifications

## PowerLOG® 30800

Dimensions [L x W x H]	510 x 507 x 507 mm	Nominal Impedance	50 Ohm
Weight	4,2 kg	VSWR (typ.)	low
Design	Open Boundary Quad-Ridged	Max. Input Power	500 W
Gain	3 – 14 dBi	Temperature Range	???
RF Connection	N-Female 2x	Relative Humidity	???
Antenna Factor	24 – 35 dB/m	Warranty	2 years
Frequency Range	300 MHz – 8 GHz	Beamwidth	17° – 65°

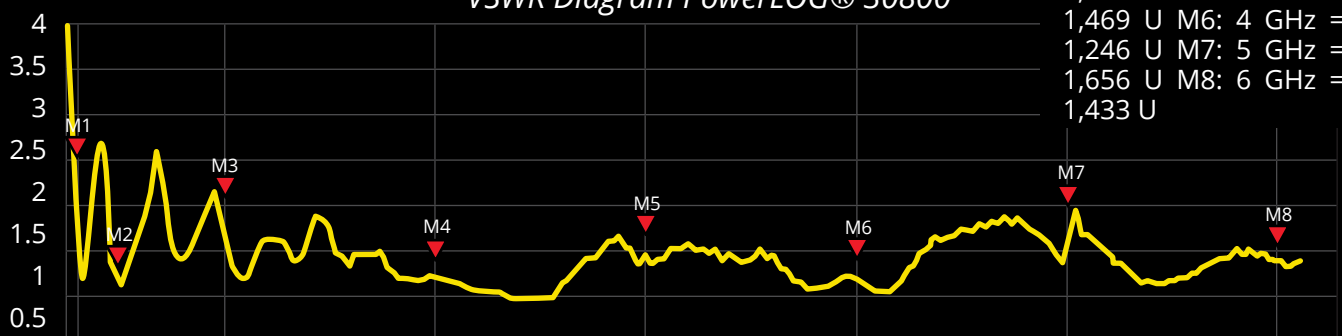
Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 30800



M1: 300 MHz = 2,281 U  
 M2: 500 MHz = 1,276 U  
 M3: 1 GHz = 1,750 U  
 M4: 2 GHz = 1,260 U  
 M5: 3 GHz = 1,469 U  
 M6: 4 GHz = 1,246 U  
 M7: 5 GHz = 1,656 U  
 M8: 6 GHz = 1,433 U

VSWR Diagram PowerLOG® 30800



# Recommended Accessories

## Heavy Tripod

(strongly recommended)

Highly recommended for our PowerLOG® antennas. Quick and easy antenna polarization change, guarantees perfectly stable antenna handling.

Order/Art.-No.: 503/015



## SMA to N Adapter

This special high-quality adapter allows for operating all PowerLOG® antennas with any standard spectrum analyzer equipped with an N connector. This adapter can be used with very high frequencies. Measuring just 30 x 20 mm in size, its nominal impedance is 50 Ohm. Layout: SMA socket (female) / N plug (male).

Order/Art.-No.: 770

## 1 m / 5 m / 10 m SMA Cable

High-quality special SMA cable, connecting test equipment to any PowerLOG® antenna. Customers can choose between three different cables:

- 1 m standard SMA cable (RG316U)
- 5 m low-loss SMA cable (especially low damping)
- 10 m low-loss SMA cable (especially low damping)

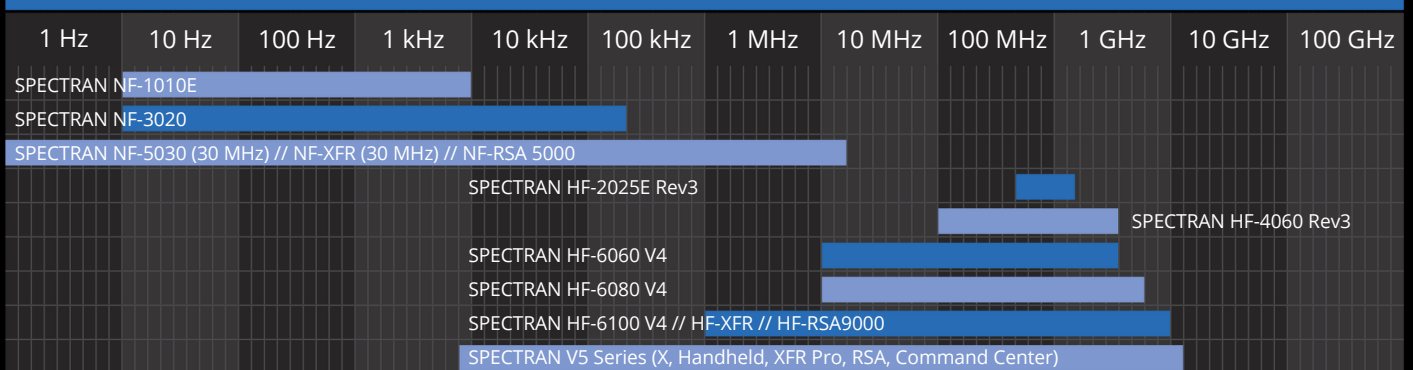
All versions: SMA plug (male) / SMA plug (male)

Order/Art.-No.: 501/006 (1 m), 501/008 (5 m), 501/0010 (10 m)

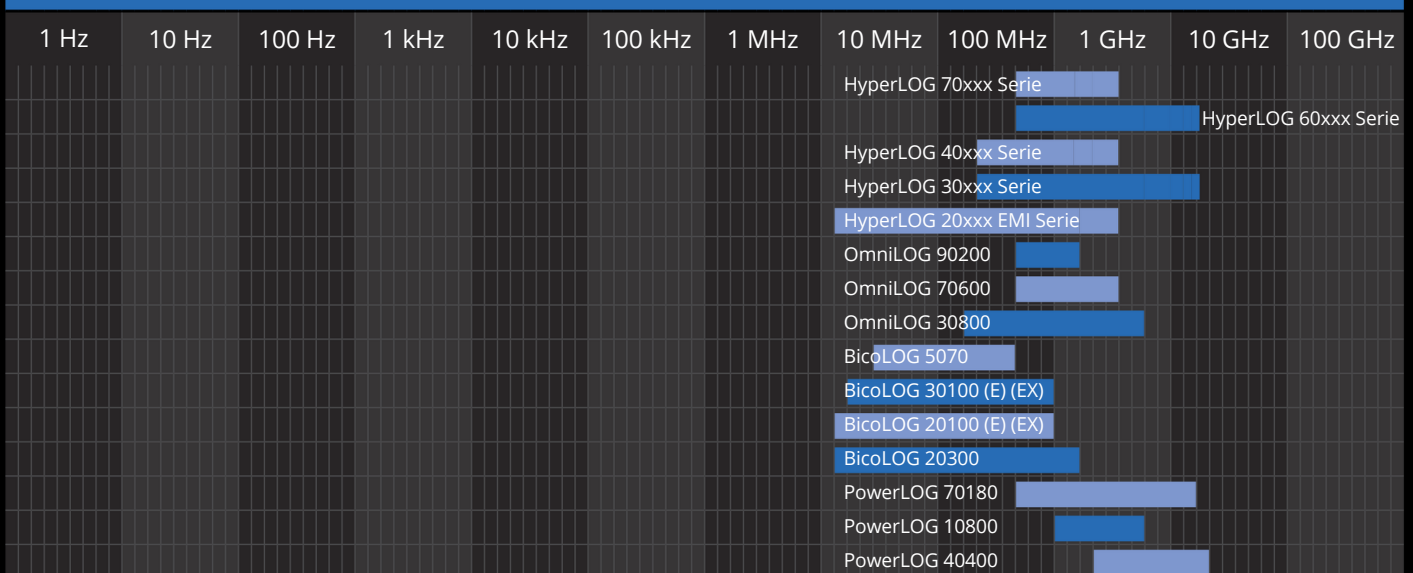


# Frequency Overviews

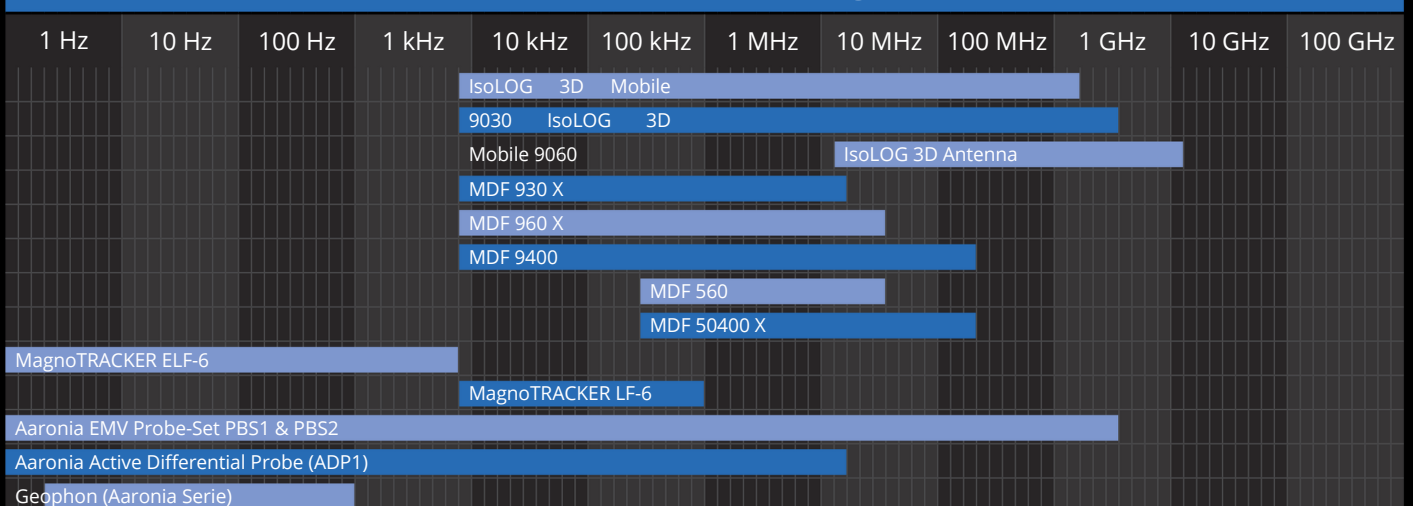
## Frequency Overview SPECTRAN® Spectrum Analyzers



## Frequency Overview HyperLOG®, BicoLOG® and PowerLOG® Antennas



## Frequency Overview IsoLOG® 3D, MDF, MagnoTRACKER® and Probes





# References



## Selected Aaronia Clients

### Government, Military, Aeronautic, Astronautic

- NATO, Belgium
- Department of Defense, USA
- Department of Defense, Australia
- Airbus, Germany
- Boeing, USA
- Bundeswehr, Germany
- NASA, USA
- Lockheed Martin, USA
- Lufthansa, Germany
- DLR, Germany
- Eurocontrol, Belgium
- EADS, Germany
- DEA, USA
- FBI, USA
- BKA, Germany
- Federal Police, Germany
- Ministry of Defense, Netherlands

### Research/Development, Science and Universities

- MIT – Physics Department, USA
- California State University, USA
- Indonesian Institute of Sciences, Indonesia
- Los Alamos National Laboratory, USA
- University of Bahrain, Bahrain
- University of Florida, USA
- University of Victoria, Canada
- University of Newcastle, United Kingdom
- University of Durham, United Kingdom
- University Strasbourg, France
- University of Sydney, Australia
- University of Athens, Greece
- University of Munich, Germany
- Technical University of Hamburg, Germany
- Max Planck Inst. for Radio Astronomy, Germany
- Max Planck Inst. for Nuclear Physics, Germany
- Research Centre Karlsruhe, Germany

### Industry

- IBM, Switzerland
- Intel, Germany
- Shell Oil Company, USA
- ATI, USA
- Microsoft, USA
- Motorola, Brazil
- Audi, Germany
- BMW, Germany
- Daimler, Germany
- Volkswagen, Germany
- BASF, Germany
- Siemens AG, Germany
- Rohde & Schwarz, Germany
- Infi neon, Austria
- Philips, Germany
- Thyssenkrupp, Germany
- EnBW, Germany
- CNN, USA
- Duracell, USA
- German Telekom, Germany
- Bank of Canada, Canada
- NBC News, USA
- Sony, Germany
- Anritsu, Germany
- Hewlett Packard, Germany
- Robert Bosch, Germany
- Mercedes Benz, Austria
- Osram, Germany
- DEKRA, Germany
- AMD, Germany
- Keysight, China
- Infi neon Technologies, Germany
- Philips Semiconductors, Germany
- Hyundai Europe, Germany
- VIAVI, Korea
- Wilkinson Sword, Germany
- IBM Deutschland, Germany
- Nokia Siemens Networks, Germany

